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C12N 7/00, A61L 2/16, A23L 3/3571Torrey, C. [US/US]: 440 Braewood Way, Severna Park,
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CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).(71) Applicant (for all designated States except US): INTR-
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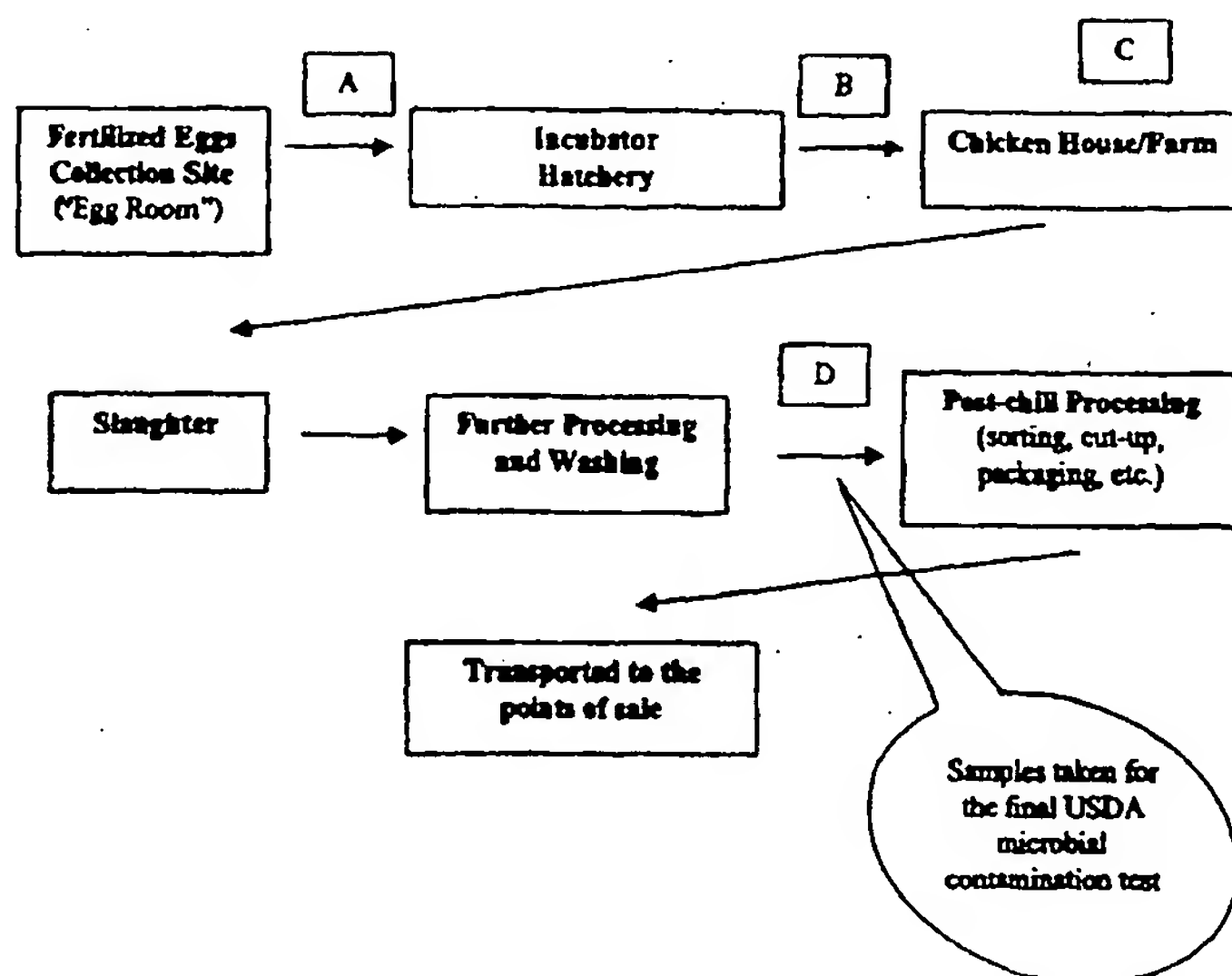
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7 February 2002For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND DEVICE FOR SANITATION USING BACTERIOPHAGES

(57) Abstract: Methods and
devices for sanitation using
bacteriophage are disclosed.
According to one embodiment
of the present invention, a
method for sanitation using at
least one bacteriophage includes
the steps of (1) storing the at
least one bacteriophage in a
container; and (2) applying the
at least one bacteriophage to a
surface to be sanitized with a
dispersing mechanism. According
to another embodiment of the
present invention, a sanitation
device that dispenses at least one
bacteriophage includes a container,
at least one bacteriophage stored
in the container, and a dispersing
mechanism that disperses the at
least one bacteriophage from the
container.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A01N63/00 C12N7/00 A61L2/16--- A23L3/3571

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01N C12N A61L A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, FSTA, EPO-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 290 295 A (MICROBIAL DEV LTD) 9 November 1988 (1988-11-09)	1-18, 20-23, 40, 42, 46-51, 57-62, 71-74, 77-79, 81-84, 86 24-39
Y	claims 1-8; examples 1-9 page 4, line 16-60 page 2, line 3-26 page 3, line 8 -page 4, line 11, 16-40, 52-56	41, 43-45, 52-56, 63-70, 75, 76, 80, 85-87
A		

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *8* document member of the same patent family

Date of the actual completion of the international search

25 September 2001

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06. 11. 2001

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INTERNATIONAL SEARCH REPORT

International Application No

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A	claims 1,2,5,7,8,10; example 1 page 1, paragraphs 1-3,5 page 2, paragraph 3 -page 4, paragraph 4 page 5, paragraphs 2,4 -page 6, paragraph 4 page 7, paragraphs 2,3 page 8, paragraph 2 ---	
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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
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A	page 541, paragraphs 1,2 page 542, paragraph 4 page 543, paragraphs 2-7 page 544, paragraphs 1-3 tables 2-5 page 545, paragraph 1 -page 548, paragraph 3 ---	40-42, 52-58
P,X	EP 0 970 613 A (MONFORT INC) 12 January 2000 (2000-01-12) claims 1-3,23-25 column 1, line 5-48 column 5, line 53 -column 9, line 19 column 10, line 5 -column 11, line 37 column 15, line 8 -column 16, line 46 ---	59-62, 67-85
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X	WO 90 13631 A (JACKSON LE ROY E) 15 November 1990 (1990-11-15) claim 1; examples 2,3 page 2, line 29-33 ---	81-86
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A	WO 96 04364 A (UNIV GEORGIA ;US AGRICULTURE (US)) 15 February 1996 (1996-02-15) claims 1,3; examples 1-3 page 4, paragraph 3 -page 5, paragraph 1 page 6, paragraph 2 -page 7, paragraph 3 ---	40-58

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
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A	WO 90 14765 A (US AGRICULTURE) 13 December 1990 (1990-12-13) claims 1-8,10,13-19; examples 1-4 page 2, line 24 -page 3, line 1 page 3, line 33 -page 4, line 19 -----	40-58

INTERNATIONAL SEARCH REPORT

International application No.
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

As a result of the prior review under R. 40.2(e) PCT,
no additional fees are to be refunded.

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-39

A method for sanitation using at least one bacteriophage, comprising storing the at least one bacteriophage in a container and applying the at least one bacteriophage to a surface to be sanitized with a dispersing mechanism. The sanitation device comprising a container, at least one bacteriophage stored in the container and the dispersing mechanism.

2. Claims: 40-58

A method of poultry processing sanitation applying at least one bacteriophage.

3. Claims: 59-70

A method of foodstuff packaging comprising foodstuff, packaging material and applying bacteriophage either to the foodstuff or packaging material.

4. Claims: 71-80

A method for foodstuff sanitation providing a bacteriophage to the foodstuff.

5. Claims: 81-87

A method for decontamination using at least one bacteriophage comprising applying at least one bacteriophage to an area contaminated with at least one pathogenic bacteriophage.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/00810

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